

## REMARKS

In response to the Office Action dated August 1, 2008 Applicant respectfully requests reconsideration based on the above claim amendments and the following remarks. Applicant respectfully submits that the claims as presented are in condition for allowance.

Claims 1-16 are pending in the present Application. Claims 1, 7 and 12 are amended, and Claim 17 is added, leaving Claims 1-17 for consideration upon entry of the present amendments and the following remarks.

Support for the amendments to claims is at least found in the specification, the figures, and the claims as originally filed. Particularly, support for amended Claims 1, 7 and 12 is at least found in originally filed Figure 4, and Claim 1. Support for new Claim 17 is at least found in originally filed Figure 4 and in the specification at page 9, lines 1-4.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

### **Claim Objections**

Claim 12 is objected to because there is no antecedent basis for “the data and gate drivers” in lines 9 and 10 of the claim. Applicant hereinabove amends Claim 12 to provide proper antecedent basis for a “data driver,” a “gate driver” and a “timing controller.” Entry of the claim amendments, reconsideration and withdrawal of the relevant claim objection are respectfully requested.

### **Claim Rejections under 35 U.S.C. §103**

Claims 1-11 and 14-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawaguchi et al., U.S. Patent No. 5,592,199 (hereinafter “Kawaguchi”), in view of Kubota et al., U.S. Patent No. 6,791,526 (hereinafter “Kubota”), and further in view of Nakamura et al., U.S. Patent No. 7,136,058 (hereinafter “Nakamura”).

Claims 12 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawaguchi in view of Nakamura. Applicant respectfully traverses the rejections.

Amended Claims 1, 7 and 12 similarly recite, *inter alia*:

“a data driver outputting image data to the LCD panel and *disposed on a data tape carrier package (TCP)*,  
wherein *the output instruction signal line is disposed between the data TCP and the gate lines.*”

Regarding independent Claims 1, 7 and 12 in the instant Office action at Pages 3, 8 and 13, electrode terminals 3 along the x-axis and bus line 73 in Figure 1 of Kawaguchi are considered as respectively teaching the “gate lines” and the “output instruction signal line” of Claims 1, 7 and 12. For purpose of this response, flexible wiring boards 4 arranged along the x-axis, are considered as a “data tape carrier package.”

As illustrated in Figures 1, 2 and 4a of Kawaguchi, the bus line 73 is overlapped with all of the flexible wiring boards 4. That is, the bus line 73 (considered as the “output instruction signal line”) is not disposed *between the flexible wiring boards 4 and the electrode terminals 3*, as claimed. Therefore, Kawaguchi *does not teach or suggest* a data driver outputting image data to the LCD panel and disposed on a data tape carrier package (TCP), the output instruction signal line is disposed between the data TCP and the gate lines of similarly amended Claims 1, 7 and 12.

In the instant Office action, Figure 18 of Kubota is relied upon as allegedly teaching that a timing of an output of image data is according to a delay of a gate driving signal.

Referring to Figure 14 of Kubota, Applicants find no teaching or suggestion of an “output instruction signal line” between a data tape carrier package of data drive circuit 4, and gate lines of the gate drive circuits 3. (See, for example, Col. 1, lines 14-55.) Figure 15 of Kubota is a block diagram illustrating an example of a conventional TFT gate drive circuit of Figure 14 with three voltage levels (Col. 2, lines 5-8) and Figure 18 is a diagram depicting the timing of the shift data and gate line driving signals in the TFT gate drive circuit shown in Figure 15. Applicants respectfully submit that Figures 15 and 18 do not illustrated, teach or suggest an “output instruction signal line” between a data tape carrier package of data drive circuit 4, and gate lines of the gate drive circuits 3.

Therefore, Kubota *does not teach or suggest* a data driver outputting image data to the LCD panel and disposed on a data tape carrier package (TCP), the output instruction signal

**line is disposed between the data TCP and the gate lines** of similarly amended Claims 1 and 7, and does not remedy the deficiencies of Kawaguchi.

In the instant Office action, Nakamura is relied upon as allegedly teaching a common electrode opposing signal line. At Page 14 of the instant Office action, Col. 4, lines 10-19, power supply wiring pattern P1 and capacitor elements C4,C5 wiring in Figures 14 and 15 of Nakamura are relied upon as teaching “signal lines” disposed on the second substrate and opposing the common electrode.

Applicants find no teaching or suggestion of an “output instruction signal line” between a data tape carrier package of data drive circuit (i.e., signal line drive circuit, Figures 1, 40 and 41) and gate lines.

Therefore, Nakamura *does not teach or suggest* **a data driver outputting image data to the LCD panel and disposed on a data tape carrier package (TCP), the output instruction signal line is disposed between the data TCP and the gate lines** of similarly amended Claims 1, 7 and 12, and does not remedy the deficiencies of Kawaguchi and Kubota.

Thus, Kawaguchi, Kubota and Nakamura, alone or in combination, *fail to disclose all of the limitations* of amended Claims 1, 7 and 12. Accordingly, *prima facie* obviousness does not exist regarding amended Claims 1, 7 and 12 with respect to Kawaguchi, Kubota and Nakamura. Applicant respectfully submits that Claims 1, 7 and 12, and Claims 2-6, 8-11 and 13-16 as respectively depending from Claims 1, 7 and 12, are not further rejected or objected, and are therefore allowable. Entry of the claim amendments, reconsideration, withdrawal of the relevant §103 rejections and allowance of Claims 1-16 are respectfully requested.

### **Conclusion**

All of the objections and rejections are herein overcome. In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. No new matter is added by way of the present Amendments and Remarks, as support is found throughout the original filed specification, claims and drawings. Prompt issuance of Notice of Allowance is respectfully requested.

Application No. 10/756,939  
Response dated: November 3, 2008  
Reply to Office Action dated: August 1, 2008

The Examiner is invited to contact Applicant's attorney at the below listed phone number regarding this response or otherwise concerning the present application.

Applicant hereby petitions for any necessary extension of time required under 37 C.F.R. 1.136(a) or 1.136(b) which may be required for entry and consideration of the present Reply.

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicant's attorneys.

Respectfully submitted,

CANTOR COLBURN LLP

By:           /Amy Bizon-Copp/            
Amy Bizon-Copp  
Registration No. 53,993  
CANTOR COLBURN LLP  
20 Church Street  
22<sup>nd</sup> Floor  
Hartford, CT 06103  
Telephone (860) 286-2929  
Facsimile (860) 286-0115  
Customer No. 23413

Date: November 3, 2008